

FILE 'USPATFULL, USPAT2, CAPLUS' ENTERED AT 13:22:26 ON 10 MAY 2006

L1 3499 FILE USPATFULL  
L2 482 FILE USPAT2  
L3 98 FILE CAPLUS  
TOTAL FOR ALL FILES  
L4 4079 S VISION (5A) CORRECT?  
L5 141 FILE USPATFULL  
L6 13 FILE USPAT2  
L7 303 FILE CAPLUS  
TOTAL FOR ALL FILES  
L8 457 S FOLD? (5A) RETINA?  
L9 141 FILE USPATFULL  
L10 13 FILE USPAT2  
L11 303 FILE CAPLUS  
TOTAL FOR ALL FILES  
L12 457 S L7 AND L8  
L13 14 FILE USPATFULL  
L14 0 FILE USPAT2  
L15 4 FILE CAPLUS  
TOTAL FOR ALL FILES  
L16 18 S FOLD? (10A) MACULAR?  
L17 0 FILE USPATFULL  
L18 0 FILE USPAT2  
L19 0 FILE CAPLUS  
TOTAL FOR ALL FILES  
L20 0 S L4 AND L8 AND L16  
L21 4 FILE USPATFULL  
L22 0 FILE USPAT2  
L23 0 FILE CAPLUS  
TOTAL FOR ALL FILES  
L24 4 S L4 AND (L8 OR L16)

=> save all

L24 ANSWER 2 OF 4 USPATFULL on STN

SUMM . . . surgery to replace the IOL, or the patient can live with the refractive error and may require prescription eyeglasses to **correct** for both near and distant **vision**. However, even repeated surgeries can be ineffective in correcting the problem.

DETD . . . The eye 10 generally consists of a cornea 14, the IOL 12, vitreous 16, the optic nerve 18 and a **retina** 20. IOL 12 is preferably **foldable**, but may be hard or any other suitable type. Further, the IOL 12 is preferably made from a polymer; however, .

DETD . . . portion 28 unaltered, the IOL 12 can exhibit multifocal properties. That is, the center portion 28 can be adjusted to **correct** for far **vision** and the peripheral portion can **correct** for close distance, such as for reading. Although, the center portion 28 and/or the peripheral portion can be configured to **correct** for any type of **vision**.

DETD . . . refractive and/or diffractive properties. That is, a radial portion adjacently the periphery of the IOL 12 can be configured to **correct** far **vision**, while a median radial area can be configured for close or reading vision. As a result of multifocality, the IOL. . .

CLM What is claimed is:

18. A system for **correcting vision** in an eye comprising: a contact lens suitable for placement onto the eye; a short pulse laser; and one or. . .

ACCESSION NUMBER: 2005:210004 USPATFULL

TITLE: Intraocular lens adapted for adjustment via laser after implantation

INVENTOR(S): Peyman, Gholam A., New Orleans, LA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005182489	A1	20050818
APPLICATION INFO.:	US 2005-106922	A1	20050415 (11)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2004-958826, filed on 4 Oct 2004, PENDING Continuation-in-part of Ser. No. US 2002-272402, filed on 17 Oct 2002, PENDING Continuation-in-part of Ser. No. US 2004-784169, filed on 24 Feb 2004, PENDING Continuation-in-part of Ser. No. US 2003-406558, filed on 4 Apr 2003, PENDING Continuation-in-part of Ser. No. US 2003-356730, filed on 3 Feb 2003, PENDING Continuation-in-part of Ser. No. US 2001-843141, filed on 27 Apr 2001, GRANTED, Pat. No. US 6551307 Continuation-in-part of Ser. No. US 2001-986141, filed on 7 Nov 2001, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-449617P	20030226 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Bell, Boyd & Lloyd LLC, P.O. Box 1135, Chicago, IL, 60690-1135, US	
NUMBER OF CLAIMS:	26	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Page(s)	
LINE COUNT:	568	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L24 ANSWER 3 OF 4 USPATFULL on STN

DETD . . . This enables the large scale manufacture of the basic device to be combined with custom fitting to a specific subject's **vision correction**. It also permits a device that can be worn without the impediment of fitting around conventional glasses.

CLM What is claimed is:

. . . mirror, so that an image of said video display subtending a large visual angle will be focused on the user's **retina**, said **folding** optics means including, a beam splitter mounted on said frame so that it is positioned between said curved mirror and. . .

. . . mirror, so that an image of said video display subtending a large visual angle will be focused on the user's **retina**, said first **folding** optics means including, a first beam splitter mounted on said frame so that it is positioned between said first curved. . . mirror, so that an image of said video display subtending a large visual angle will be focused on the user's **retina**, said second **folding** optics means including, a second beam splitter mounted on said frame so that it is positioned between said second curved. . .

ACCESSION NUMBER: 92:81121 USPATFULL

TITLE: Video display on spectacle-like frame

INVENTOR(S): Massof, Robert W., Baltimore, MD, United States

O'Shea, Donald C., Atlanta, GA, United States

Raasch, Thomas W., Baltimore, MD, United States

PATENT ASSIGNEE(S): The Johns Hopkins University, Baltimore, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5151722		19920929
APPLICATION INFO.:	US 1990-609243		19901105 (7)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Bovernick, Rodney B.		
LEGAL REPRESENTATIVE:	Califano, Howard W.		
NUMBER OF CLAIMS:	22		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 5 Drawing Page(s)		
LINE COUNT:	580		

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# macular

Maculate

1. Relating to or marked by macules.
2. Denoting the central retina, especially the macula retinae.

(05 Mar 2000)

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**Previous:** macula lutea, macula of saccule, macula of utricle, macula pellucida

**Next:** macular amyloidosis, macular area, macular arteries, macular atrophy

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## retina

Light sensitive layer of the eye. In vertebrates, looking from outside, there are four major cell layers: (i) the outer neural retina, which contains neurons (ganglion cells, amacrine cells, bipolar cells) as well as blood vessels, (ii) the photoreceptor layer, a single layer of rods and cones, (iii) the pigmented retinal epithelium (PRE or RPE), (iv) the choroid, composed of connective tissue, fibroblasts and including a well vascularised layer, the chorio capillaris, underlying the basal lamina of the PRE. Behind the choroid is the sclera, a thick organ capsule.

In molluscs (especially cephalopods such as the squid) the retina has the light sensitive cells as the outer layer with the neural and supporting tissues below.

See: retinal rods, retinal cones, rhodopsin.

(18 Nov 1997)

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**Previous:** reticulum cell, reticulum cell sarcoma, reticulum trabeculare sclerae, retiform

**Next:** retinacula musculorum fibularium, retinacula musculorum peroneorum

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# DISCOVERY

The Discovery Fund for Eye Research

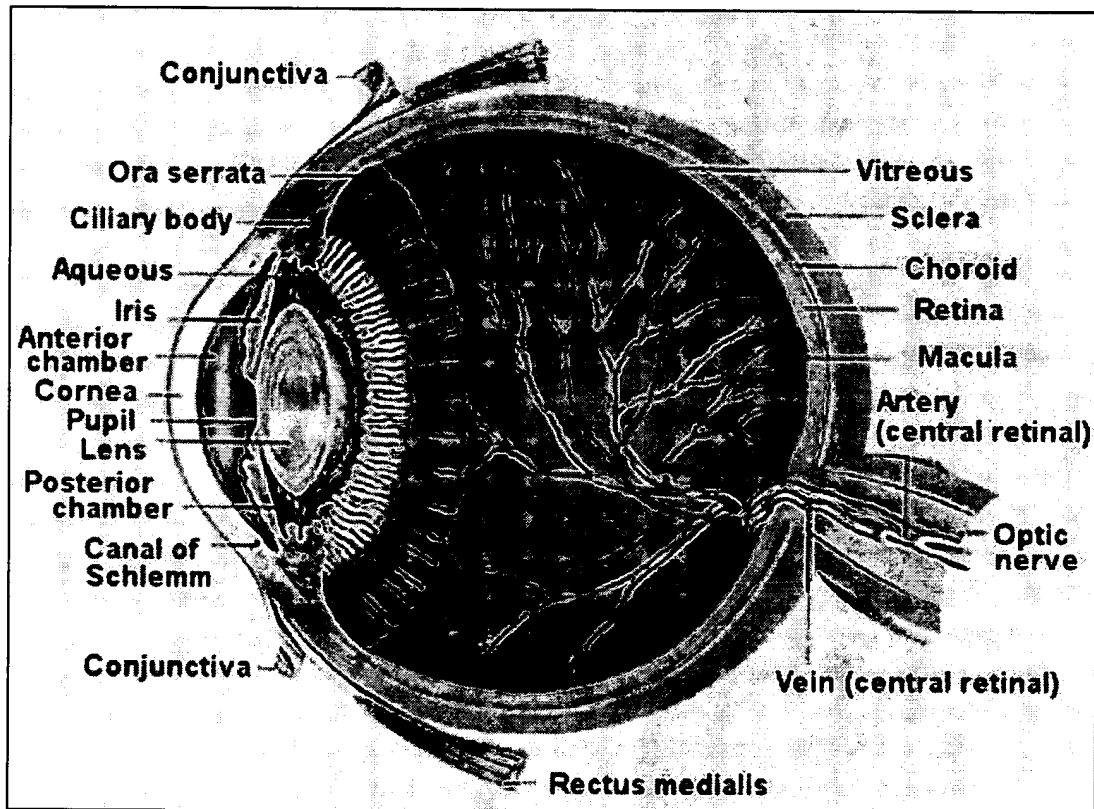
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## Anatomy of the Eye

This diagram of a human eye and the following definitions will be useful as you review the materials in this Web site. Each term in the diagram is a link to its definition below.



Along with the diagram of the eye above, we hope these definitions will be useful as you review the materials in this Web site.

- The **anterior chamber** is the area bounded in front by the cornea and in back by the lens, and filled with aqueous.
- The **aqueous** is a clear, watery solution in the anterior and posterior chambers.
- The **artery** is the vessel supplying blood to the eye.
- The **canal of Schlemm** is the passageway for the aqueous fluid to leave the

eye.

- The **choroid**, which carries blood vessels, is the inner coat between the sclera and the retina.
- The **ciliary body** is an unseen part of the iris, and these together with the ora serrata form the uveal tract.
- The **conjunctiva** is a clear membrane covering the white of the eye (sclera).
- The **cornea** is a clear, transparent portion of the outer coat of the eyeball through which light passes to the lens.
- The **iris** gives our eyes color and it functions like the aperture on a camera, enlarging in dim light and contracting in bright light. The aperture itself is known as the pupil.
- The **lens** helps to focus light on the retina.
- The **macula** is a small area in the retina that provides our most central, acute vision.
- The **optic nerve** conducts visual impulses to the brain from the retina.
- The **ora serrata** and the ciliary body form the uveal tract, an unseen part of the iris.
- The **posterior chamber** is the area behind the iris, but in front of the lens, that is filled with aqueous.
- The **pupil** is the opening, or aperture, of the iris.
- The **rectus medialis** is one of the six muscles of the eye.
- The **retina** is the innermost coat of the back of the eye, formed of light-sensitive nerve endings that carry the visual impulse to the optic nerve. The retina may be compared to the film of a camera.
- The **sclera** is the white of the eye.
- The **vein** is the vessel that carries blood away from the eye.
- The **vitreous** is a transparent, colorless mass of soft, gelatinous material filling the eyeball behind the lens.

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